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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/621,825	07/21/2000	Jung Tae Kang	06192.0146AA	4506

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EXAMINER

NGUYEN, JIMMY H

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 05/09/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/621,825

Applicant(s)

KANG ET AL.

Examiner

Jimmy H. Nguyen

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 and 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is made in response to applicant's RESPONSE TO ELECTION REQUIREMENT AND AMENDMENT, filed on 03/11/03 (entered into the file wrapper as Paper No. 6).
2. Applicant's election of Species II, as illustrated in figs. 7-11, in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
3. Claims 6-8 and 14-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species I and III, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 6.
4. Applicant indicates claims 9-13 and 17 readable on elected species II as illustrated in figs. 7-11. However, claim 17 is only readable in figures 5-6, i.e., nonelected species I, because this claim recites the features, "hinges" and "latches", only readable in nonelected species I. Claims 1-5 are additionally readable on elected species II. Accordingly, the examiner believes claims 1-5 and 9-13 readable on elected species II and being considered as follows:

Priority

5. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in 09/621,825 on 07/21/2000. It is noted, however, that applicant has not filed a certified copy of the priority applications as required by 35 U.S.C. 119(b).

Specification

Art Unit: 2673

6. A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because the top margin of at least 2.0 cm (3/4 inch) is required under 37 CFR 1.52, See MPEP 608.01, Paper Requirements.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and must be accompanied by: 1) a statement that the substitute specification contains no new matter; and 2) a marked-up copy showing the amendments to be made via the substitute specification relative to the specification at the time the substitute specification is filed.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yun et al (USPN: 5,835,139), hereinafter Yun, and further in view of Murai (USPN: 5,986,726).

As per claims 1-5, Yun discloses an information processing apparatus (see a LCD device as shown in fig. 7) comprising a LCD module (LCD assembly structure as shown in fig. 6) including a backlight assembly (an assembly including elements 110-180, see fig. 6) having a light source portion (a luminescent lamp 110) and a wedge-shaped light conducting plate (130), a LCD panel (a liquid crystal panel 300) having a source printed circuit board on one side of the

Art Unit: 2673

LCD panel (see fig. 6), a mold frame (a first support frame 190) and a chassis (a second frame support 400); and an information processing module (a driving circuit board 23, col. 2, lines 18-20) having a LCD panel driving circuit (a control circuit, col. 2, lines 7-10) and located behind the rear part of the backlight unit (col. 2, lines 16-20). Accordingly, the difference between the claimed invention as specified in claims above and the Yun reference is that Yun does not disclose expressly the information processing module (23) located from the outside of the mold frame and the chassis, and the particular shapes of the mold frame and the chassis, in the manner as recited in the claims above. However, as noting in fig. 5, Murai discloses expressly the information processing module (a driver circuit board 4) located from the outside of the mold frame (a bottom portion of a metal sheet 1) and the chassis (the engagement portions 11), for generating and supplying a driving signal to drive LCD panel via the source printed circuit board (a driver circuit provided in peripheral edges of the circuit array substrate, col. 5, lines 40-53), and the mold frame formed to be gradually thinner as further advancing from a first side (the side to the right of the light guiding plate 7 and next to the resin frame, as shown in fig. 1) of accepting to place the light source portion toward a second side in opposition to the first side (the side to the right of the light guiding plate 7), further see col. 4, lines 16-39.

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to utilize Murai's teachings above, i.e., locating the information processing module (23) from the outside of the mold frame and the chassis, and forming the mold frame as well as the chassis to be gradually thinner as further advancing from a first side of accepting to place the light source portion toward a second side in opposition to the first side, in the apparatus of Yun because this would provide an apparatus with features of small size, thin thickness and

Art Unit: 2673

light weight, and the apparatus which substantially prevents electromagnetic wave noises generated by a driver circuit board from interfering with other electronic components, as taught by Murai (col. 2, lines 1-11).

9. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yun in view of Murai, as applied to claim 5 above, and further in view of Williamson et al. (USPN: 5,475,381), hereinafter Williamson.

As per claim 9, as discussed above, Yun discloses an information processing module (a driving circuit board 23, col. 2, lines 18-20) having a LCD panel driving circuit (a control circuit, col. 2, lines 7-10), but does not disclose expressly that the information processing module comprising a central processing unit, means for storing or supplying data and signal processing means for processing video data. Further, Yun discloses that the body of the computer is in a separate housing. Furthermore, Yun's body of the computer inherently comprising a central processing unit, means for storing or supplying data and signal processing means for processing video data, in order to display an image on the display unit. Accordingly, the difference between the claimed invention as specified in claim above and the combination of Yun and Murai references is that the central processing unit, means for storing or supplying data and signal processing means for processing video data are all located in a separate housing, instead on the module containing a LCD panel driving circuit. However, as noting in figs. 1-2, Williamson discloses an information processing circuit located in the rear of the LCD module (52) and comprising a LCD panel driving circuit (a LCD controller 58), a central processing unit (a microcontroller 56, col. 3, lines 27-32), means for storing or supplying data (a storage unit 61, col. 3, lines 38-41) and signal processing means for processing video data (memory controller

Art Unit: 2673

57). It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to utilize Williamson's teachings above, i.e., locating a central processing unit, means for storing or supplying data and signal processing means for processing video data on the same module which the LCD panel driving circuit is integrated on, in the apparatus of Yun because this would reduce the size of the apparatus which is small enough to fit into a pocket, as taught by Williamson (col. 2, lines 54-60).

Regarding to claim 10 and 11, see the rejection to claims 1-5 above.

Regarding to claim 12, Williamson further teaches the storage unit (61) comprising RAMs (62, 63) and ROM (64) (col. 3, lines 38-41).

Regarding to claim 13, Williamson further teaches the information processing module further comprising interfacing means for interfacing data with an external information processing module (col. 7, lines 8-10), sound control means (system speaker 72, col. 4, lines 17-19) and communicating means for performing external communication (IR emitter 53 and IR receiver 54, see fig. 2).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is (703) 306-5422. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Art Unit: 2673

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

JHN
May 1, 2003


Amare Mengistu
Primary Examiner